Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of holographic recording, comprising the steps of:

forming a laser beam into a collimated beam having an expanded diameter and then dividing the diameter into an object beam and a reference beam;

modulating the divided object beam according to information to be recorded;

making these object and reference beams incident on the reflective surface of a rotating polygon mirror, while maintaining collimated beam shapes and being adjacent to each other, through a condenser lens having a focal point behind the reflective surface of the polygon mirror; and

moving the object and reference beams reflected on the reflective surface in a scanning direction determined by the angle change of the reflective surface, and meanwhile making the object and reference beams incident on ~~the holographic~~a holographic recording medium moving in the same direction as the scanning direction with angles different from each other so as to interfere with each other within the holographic recording medium.

2. (Currently Amended) A method of holographic recording, comprising the steps of:

driving a holographic recording medium, and meanwhile irradiating a first recording beam comprising one recording beam set from among multiple recording beam sets in ~~the recording~~a recording time while moving substantially in synchronization with and in the same direction as the holographic recording medium from an original ~~position,~~ position in an asking servo control, the one recording beam set comprising an object beam and a reference beam forming an interference fringe on the holographic recording medium;

bringing the first recording beam set back to the original position ~~in the~~in a following recovery ~~time;~~ time, which is the time required for the asking servo control to recover; and

irradiating at least a second recording beam comprising one recording beam set from among the remaining multiple recording beam sets in the recovery time of the first recording beam while moving substantially in synchronization with and in the same direction as the holographic recording medium, wherein the recovery time for one of the first and second recording beams occurs when the other of the first and second recording beams is recording.

3. (Original) The method of holographic recording according to claim 2, wherein the multiple recording beam sets are irradiated to the holographic recording medium while being alternately offset either in the driving direction of the holographic recording medium or in the direction orthogonal to the driving direction.

4. (Original) A holographic recording apparatus comprising:

a recording medium driver for driving a holographic recording medium capable of recording an interference fringe of incident object and reference beams;

a laser light source;

a beam expander for expanding a laser beam emitted from the laser light source to form a collimated beam having an expanded beam diameter;

a collimated beam divider for dividing the beam diameter of the collimated beam expanded by the beam expander;

a polygon mirror that is freely rotatable;

a condenser lens having a focal point that allows an incident collimated beam to be focused behind the reflective surface of the polygon mirror;

an object optical system and a reference optical system for guiding one of the divided collimated beams as an object beam and the other as a reference beam to the condenser lens as incident collimated beams;

a scanning optical system for guiding the object and reference beams reflected on the reflective surface of the rotating polygon mirror to the holographic recording medium while controlling the scanning direction determined by the rotation of the polygon mirror to match the moving direction of the holographic recording medium; and

a spatial light modulator, disposed in the object optical system, for modulating the object beam according to information to be recorded,

wherein the object optical system and the reference optical system are configured so that the object and reference beams are integrated so as to maintain collimated beam shapes and be adjacent to each other without overlapping, and are made incident on the condenser lens with substantially the same beam shape as the collimated beam.

5. (Original) The holographic recording apparatus according to claim 4, wherein the scanning optical system is configured as a 4f-optical system.

6. (Original) The holographic recording apparatus according to claim 4, wherein the scanning optical system includes an f-θ lens which refracts the object and reference beams reflected by the polygon mirror such that when an angle between an optical axis of the polygon mirror and a central optical axis of the f-θ lens is θ, the refracted object and reference beams are parallel to the central optical axis of the f-θ lens along an optical axis whose distance from the central optical axis of the f-θ lens is proportional to the θ.

7. (Original) The holographic recording apparatus according to claim 6, wherein a relay lens is disposed between the f-θ lens in the scanning optical system and the polygon

mirror, the relay lens focusing the object and reference beams reflected from the polygon mirror to the focal point of the f-θ lens.

8. (Original) A holographic recording apparatus comprising:

a recording medium driver for driving a holographic recording medium capable of recording an interference fringe of incident object and reference beams;

a laser light source;

recording beam optical systems for guiding multiple recording beam sets separately to the holographic recording medium and whose number is the same as the number of recording beam sets, each of the recording beam sets comprising an object beam and a reference beam both formed by dividing a laser beam emitted from the laser light source;

a spatial light modulator, disposed in an object optical system that guides the object beam in each of the recording beam optical systems, for modulating the object beam according to information to be recorded;

a light shutter, disposed in a reference optical system that guides the reference beam in each of the recording beam optical systems, for blocking the reference beam independently; and

a controller for controlling the recording medium driver, each of the light shutters, and each of the spatial light modulators,

wherein:

the recording beam optical systems are sequentially provided with a first tracking mirror, a second tracking mirror, and so on, the first tracking mirror reflecting a first recording beam in a first recording beam optical system from among the multiple recording beam optical systems and moving the reflection point of the first recording beam, the second tracking mirror reflecting a second recording beam, which is guided by a second recording beam optical system from among the multiple recording beam optical systems, and the first

recording beam, which is reflected from the first tracking mirror, toward the holographic recording medium and moving the reflection points of the second recording beam and the first recording beam in parallel with the reflection point on the first tracking mirror;

the recording beam optical systems each are configured so that the recording beams are alternately offset at least either in a driving direction of the holographic recording medium or in a direction orthogonal thereto and are made incident on the holographic recording medium; and

the controller can control each of the tracking mirrors and controls each of the tracking mirrors so that sequential recording on the holographic recording medium can be performed by the recording beams and one of the recording beams can be moved in the driving direction of the holographic recording medium in synchronization therewith in the period of recording while another recording beam is moving in the direction opposite to the driving direction, and controls the light shutter in a recording beam optical system of the recording beam not in recording operation to block an optical path of the recording beam optical system.